

REMARKS

The applicants note with appreciation the acknowledgement of the claim for priority under section 119 and the notice that all of the certified copies of the priority documents have been received.

The applicants acknowledge and appreciate receiving an initialed copy of the form PTO-1449 that was filed on 2 March 2004.

Claims 1 – 16 are pending. The applicants respectfully request reconsideration and allowance of this application in view of the above amendments and the following remarks.

Claims 1, 2 and 14 – 16 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent publication No. 2002/0087235, Aga et al. (“Aga”). Dependent claims 8 and 13 were rejected under 35 USC 103(a) as being unpatentable over Aga in view of U.S. Patent No. 6,618,655, Tobaru et al. (“Tobaru”). The rejection is respectfully traversed for reasons including the following, which are provided by way of example.

Independent claim 1 recites in combination, for example, “a trip-over determination unit determining whether an anticipated rollover of the vehicle as a pattern of trip-over in response to both the lateral acceleration and the roll condition of the vehicle;” “a trip-over pattern recognition unit recognizing the pattern of trip-over based on the lateral acceleration of the vehicle, when the anticipated rollover of the vehicle has the pattern of trip-over;” and “a rollover determination criteria unit setting a rollover determination criterion for the vehicle depending on the recognized pattern of trip-over.” Independent claim 15 recites, in combination “means for determining whether an anticipated rollover of the vehicle has a pattern of trip-over in response to both the lateral acceleration and the roll condition of the vehicle;” “means for recognizing the

pattern of trip-over based on the lateral acceleration of the vehicle, when the anticipated rollover of the vehicle has the pattern of trip-over; and “means for setting a rollover determination criterion for the vehicle depending on the recognized pattern of trip-over.” Independent claim 16 recites, in combination, “determining whether an anticipated rollover of the vehicle has a pattern of trip-over in response to both the lateral acceleration and the roll condition of the vehicle;” “recognizing the pattern of trip-over based on the lateral acceleration of the vehicle, when the anticipated rollover of the vehicle has the pattern of trip-over;” and “setting a rollover determination criterion for the vehicle depending on the recognized pattern of trip-over.”

Thereby, the system can not only determine that the rollover is a trip-over in response to lateral acceleration and roll condition, but can also determine the pattern of the trip-over based on the lateral acceleration.

On the other hand, without conceding that Aga discloses any feature of the present invention, Aga is directed to a rollover determining apparatus. According to Aga, “the rollover determining apparatus may determine whether one of a flip-over, turn-over and trip-over will occur to the vehicle based on the lateral acceleration and the roll angle of the vehicle.” (Paragraph [0010].) Aga discloses use of a threshold “determination by lateral acceleration-roll rate” for recognizing a rollover (e.g., Fig. 8, Fig. 10, Fig. 11).

The office action asserts that Aga anticipates the invention as claimed. To the contrary, Aga fails to set forth each and every element found in the claims. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226,

1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The present office action fails to present a *prima facie* case of anticipation because it fails to allege that Aga teaches every claimed element. For example, the office action does not discuss the “trip-over pattern recognition unit recognizing the pattern of trip-over based on the lateral acceleration of the vehicle, when the anticipated rollover of the vehicle has the pattern of trip-over” recited in claim 1. If the examiner maintains the rejection, he is respectfully requested to cite the relevant portions of Aga with respect to each recited element.

Alternatively, the present office action fails to present a *prima facie* case of anticipation because it cites the same portion of Aga as corresponding to two different recited elements. The office action argues that Aga teaches “a processor-based control module (10) which performs the functions of determining the type of rollover (i.e., trip-over) based on characteristics or patterns of signals obtained from the roll condition and lateral acceleration sensors and determining a criterion (threshold) for recognizing a rollover.” However, a single specific element of Aga fails to anticipate two different elements in the claims, such as the “trip-over determination unit” and the “trip-over pattern recognition unit,” as further recited in claim 1.

In any event, Aga fails to teach or suggest, for example, “a trip-over pattern recognition unit recognizing the pattern of trip-over based on the lateral acceleration of the vehicle, when the anticipated rollover of the vehicle has the pattern of trip-over.” (See, e.g., claim 1.) To the contrary, Aga fails to teach or suggest further recognizing the pattern of the trip-over when the anticipated rollover is a trip-over. Moreover, Aga fails to teach separately recognizing the pattern of the trip-over “based on the lateral acceleration of the vehicle.”

With respect to independent claim 15, moreover, the applicants respectfully traverse the examiner's treatment of the means-plus-function claim language. Regarding means plus function language, the Court of Appeals for the Federal Circuit, in its *en banc* decision *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994), held that:

Per our holding, the "broadest reasonable interpretation" that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination. (Emphasis added.)

Therefore, a "means or step plus function" limitation should be interpreted in a manner consistent with the specification disclosure. The Federal Circuit explained the two step analysis involved in construing means-plus-function limitations in *Golight Inc. v. Wal-Mart Stores Inc.*, 355 F.3d 1327, 1333-34, 69 USPQ2d 1481, 1486 (Fed. Cir. 2004): "The first step in construing a means-plus-function claim limitation is to define the particular function of the claim limitation. ... The next step in construing a means-plus-function claim limitation is to look to the specification and identify the corresponding structure for that function." (*Id.*; citations omitted.) Here, the examiner has failed to consider either part of the two step analysis.

The MPEP requires that the examiner must find that a prior art element: (A) performs the function specified in the claim, (B) is not excluded by any definition provided in the specification for an equivalent, and (C) is an equivalent of the means-plus-function limitation. Factors that will support a conclusion that the prior art element is an equivalent are: (1) the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000); (2) a person of ordinary skill in the art would have recognized the interchangeability of the element shown in the prior art for the corresponding element disclosed in the specification.

Caterpillar Inc. v. Deere & Co., 224 F.3d 1374, 56 USPQ2d 1305 (Fed. Cir. 2000); (3) there are insubstantial differences between the prior art element and the corresponding element disclosed in the specification. *IMS Technology, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1436, 54 USPQ2d 1129, 1138 (Fed. Cir. 2000); and (4) the prior art element is a structural equivalent of the corresponding element disclosed in the specification. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990), i.e., the prior art element performs the function specified in the claim in substantially the same manner as the function is performed by the corresponding element described in the specification. (MPEP § 2183.) The office action has failed to do so with respect to the means plus function elements recited in independent claim 15.

Consider, by way of example, the recited “means for recognizing the pattern of trip-over.” As described in the specification, for example, “a signal generated by the trip-over determination block 38, which is indicative of the determination results thereof, is provided to the trip-over pattern determination block 34 …” (Page 10, lines 8 – 10). Also, “the trip-over pattern recognition sub-block 34a recognizes the pattern of trip-over depending on a parameter selected from a set of parameters indicative of characteristics of the lateral acceleration G_Y of the vehicle.” (Page 12, lines 23 – 26.) Further, “the pattern of trip-over, which an anticipated rollover of the vehicle has, can be recognized as curbstone trip-over, SUV trip-over, rough road trip-over, or sandy place trip-over, depending on the characteristics of the lateral acceleration G_Y of the vehicle which rises in the anticipated rollover event.” (Page 15, lines 7 – 11.) The office action has failed to properly define the particular function of the claim limitation. Moreover, the office action has completely failed to look to the specification and identify the corresponding structure for that function. The applicants respectfully submit that Aga fails to teach or suggest the means for recognizing the pattern of trip-over recited in independent claim 15.

Aga fails to teach or suggest, for example, these elements recited in independent claims 1, 15, and 16. It is respectfully submitted therefore that claims 1, 15 and 16 are patentable over Aga.

For at least these reasons, the combination of features recited in independent claims 1, 15, and 16, when interpreted as a whole, is submitted to patentably distinguish over the prior art. In addition, Aga clearly fails to show other recited elements as well.

With respect to the rejected dependent claims, applicants respectfully submit that these claims are allowable not only by virtue of their dependency from independent claim 1, but also because of additional features they recite in combination.

The applicants respectfully submit that, as described above, the cited prior art does not show or suggest the combination of features recited in the claims. The applicants do not concede that the cited prior art shows any of the elements recited in the claims. However, the applicants have provided specific examples of elements in the claims that are clearly not present in the cited prior art.

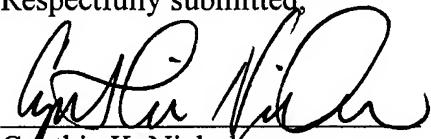
The applicants strongly emphasize that one reviewing the prosecution history should not interpret any of the examples the applicants have described herein in connection with distinguishing over the prior art as limiting to those specific features in isolation. Rather, for the sake of simplicity, the applicants have provided examples of why the claims described above are distinguishable over the cited prior art.

Claims 3 – 7 and 9 – 12 were objected to, but indicated as allowable if rewritten in independent form. However, for the reasons provided above, it is respectfully submitted that these claims are allowable without being rewritten.

In view of the foregoing, the applicants respectfully submit that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

Please charge any unforeseen fees that may be due to Deposit Account No. 50-1147.

Respectfully submitted,



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